## D.P.U. 93-DS-21

Adjudicatory hearing in the matter of a possible violation of General Laws Chapter 82, Section 40 by Eastern Edison Company, Brockton, Massachusetts.

APPEARANCES: Gail Soares, Investigator

Department of Public Utilities

100 Cambridge Street

Boston, Massachusetts 02202

FOR: THE PIPELINE SAFETY AND ENGINEERING

DIVISION

David Fazzone, Esq. McDermott, Will and Emery 75 State Street Boston, Massachusetts 02109-1807

FOR: EASTERN EDISON COMPANY

## I. <u>INTRODUCTION</u>

On March 22, 1993, the Pipeline Safety and Engineering Division ("Division") of the Department of Public Utilities ("Department") issued a Notice of Probable Violation ("NOPV") to Eastern Edison Company ("Respondent") alleging that the Respondent violated G.L. c. 82, § 40 ("Dig-Safe Law"), by failing to exercise reasonable precautions in performing an excavation on Liberty Street, Hanson, Massachusetts, on February 2, 1993. The excavation resulted in damage to underground facilities owned by Bay State Gas Company ("Bay State").

The NOPV informed the Respondent of its right to appear before a Division hearing officer in an informal conference to be held on April 22, 1993 at the Department's offices. The NOPV also stated that, in the alternative, the Respondent could submit a written reply by April 22, 1993.

The Respondent filed a response to the NOPV denying that it had violated the Dig-Safe Law. The Division issued an informal decision on July 20, 1993 finding that the Respondent violated the Dig-Safe Law by failing to exercise reasonable precaution in performing the excavation. In the decision, the Division informed the Respondent of its right to request an adjudicatory hearing before the Department. The Respondent was dissatisfied with the informal decision and requested an adjudicatory hearing before the Department. After due notice, an adjudicatory hearing was held on August 4, 1994, pursuant to 220 C.M.R. §§ 99.00 et seq.

The Division presented two witnesses: Brant Bollivar, supervisor-distribution, maps and records at Bay State; and Paul Grieco, inspector, for the Pipeline Engineering and Safety Division.

The Division offered the following exhibits as evidence: the Respondent's letter requesting an

adjudicatory hearing (Exh. Div. 1); the informal decision (Exh. Div. 2); letter confirming rescheduled hearing date (Exh. Div. 3); the NOPV (Exh. Div. 4); Dig-Safe violation report (Exh. Div. 5); Dig-Safe requests (Exh. Div. 6); the damage report (Exh. Div. 7); field inspection report (Exh. Div. 8); affidavit of Patrick Lupien, dated May 5, 1993 (Exh. Div. 9); and a letter, dated May 18, 1993, to Gail Soares from Terrence McManus of Eastern Utilities with an affidavit from Patrick Lupien, dated May 17, 1993.

The Respondent sponsored three witnesses: Patrick Lupien, crew chief for the Respondent; Ken Roberts, lineman first class for the Respondent; and Kenneth Burton, assistant superintendent-distribution for the Respondent. The Respondent offered the following exhibits: 14 photographs and a map of the site (Exh. R. 1); weather report for February 2, 1993 (Exh. R. 2); two photographs of the auger (Exh. R. 3); and federal regulations at 49 C.F.R. §§ 192.5 - 192.13 and §§ 192.315 - 192.327 (Exh. R. 4). The Department moved all exhibits into evidence. On August 12, 1994, the Division filed a brief ("Division Brief") in support of its position. On the same day, the Respondent also filed a brief ("Respondent Brief").

#### II. <u>SUMMARY OF FACTS</u>

This case arises out of an excavation resulting in damage to a gas main owned by Bay State. The Respondent's project consisted of relocating telephone poles in Hanson, Massachusetts (Tr. at 12). On February 2, 1991, the Respondent was in the process of relocating Pole No. 39 on Liberty Street in Hanson (<u>id.</u>). In the course of the excavation, a Bay State gas main was damaged (<u>id.</u>). Below is a summary of the parties' versions of the facts.

## A. The Division

The Division maintained that the damage occurred while the Respondent was operating an auger directly over the gas main (Exhs. Div. 2, 7). The Dig-Safe tickets reveal that Respondent did not notify Dig-Safe of the excavation at Pole No. 39 (Tr. at 12-13; Exhs. Div. 2, Div. 6). Mr. Bollivar testified that, nonetheless, the area was properly marked at the time of the excavation (Tr. at 17). He speculated that Bay State marked Pole No. 39 in response to requests from water contractors, but Mr. Bollivar indicated that he had no personal knowledge of why Bay State in fact marked Pole No. 39 (id. at 16-17).

Mr. Grieco testified that federal regulations require, and that the Division enforces a depth of 24 inches for gas mains located off state highways (<u>id.</u> at 37-38). He noted that the 24-inch minimum depth requirement applies to the gas main at issue since the main was not located under a state highway (<u>id.</u> at 36). Mr. Grieco testified that at the time of the excavation, a sidewalk and curb needed to be installed, which would add approximately another six inches of cover (<u>id.</u> at 37). On May 28, 1993, the Division conducted a field inspection six feet north of Pole No. 39 to determine the depth of the facility. (Exh. Div. 8). Mr. Grieco was present at the inspection and observed a four inch plastic main, with approximately 30 inches of cover (<u>id.</u> at 39). He testified that the soil surrounding the main was relatively clean and free from large rocks (<u>id.</u>). Mr. Grieco indicated the inspection was not conducted at the same location where the damage occurred (<u>id.</u> at 53). He stated, although, that the depth of the facility remains constant since the four inch pipe is not flexible (<u>id.</u> at 54). Mr. Grieco further stated that under frozen ground conditions, damage could be avoided by not operating an auger near or over a main (<u>id.</u> at 40).

#### B. The Respondent

Mr. Lupien testified that he operated the auger and that Mr. Roberts assisted him on the project at the time of the damage (<u>id.</u> at 65, 71-72). He stated that he had approximately six years of experience operating an auger and prior to the damage, he had performed approximately 500 excavations to relocate poles all without incident (<u>id.</u> at 63, 64).

Both Mr. Lupien and Mr. Roberts testified that Pole No. 39 was marked (<u>id.</u> at 65, 93). Thus, Mr. Lupien stated that the Respondent knew it was digging in the area of the main (<u>id.</u> at 66). Mr. Lupien indicated due to the location of the sidewalk and the curb, the engineer did not have much discretion in positioning the new poles (<u>id.</u> at 82).

The weather report showed that the temperature was well below freezing and approximately three inches of snow remained on the ground on the day of the excavation (Exh. R. 2). Mr. Lupien testified that the frost penetrated approximately two feet into the earth (Tr. at 68). He further testified that due to the frost, it was physically impossible to perform the excavation entirely by hand (id. at 75). Mr. Lupien stated that the Respondent did not use a jackhammer for safety reasons, and a jackhammer provides less control than an auger (id. at 75). He testified that he therefore intended to use the auger to dig 12 - 18 inches and then hand dig to uncover the utilities (id. at 68). Mr. Roberts confirmed that the Respondent performed hand digging where possible (id. at 94).

Mr. Lupien testified that the Respondent operated the auger at a very slow speed, at 10 revolutions per minute, and also noted that the excavation at Pole No. 39 began at 10:00 a.m. and the damage occurred around 1:00 p.m. (id. at 71, 73). He stated that in the course of the

The Respondent conceded that the Dig-Safe notice did not reflect a request for markings for Pole No. 39 (Tr. at 23).

excavation, the Respondent uncovered approximately 25 rocks, at an average size of 12 inches (<u>id.</u> at 70). The Respondent removed the rocks using a digging bar (<u>id.</u>). Mr. Roberts testified that the Respondent continually examined the conditions of the ground while operating the auger (<u>id.</u> at 105). Mr. Lupien surmised that the auger struck a piece of frost or a rock which caused the damage (<u>id.</u> at 106). Mr. Lupien testified he was certain the auger did not penetrate more than 18 inches at the time the damage occurred (<u>id.</u> at 87). In support, both Mr. Lupien and Mr. Roberts testified that the measurements taken after the damage occurred showed the location of the main at 30 inches below the surface (<u>id.</u> at 79, 92-93). Mr. Burton testified that the procedure used to excavate the hole at Pole No. 39 comports with industry practice (<u>id.</u> at 100).

Mr. Lupien also testified that the Respondent had excavated approximately 20 holes in the area before the incident occurred (<u>id.</u> at 64). Mr. Roberts indicated that the Respondent used the same procedure at Pole 39 as it used in performing the prior excavations (<u>id.</u> at 94). He noted that the Respondent previously encountered utilities without damage (<u>id.</u> at 95).

#### III. <u>POSITIONS OF THE PARTIES</u>

#### A. <u>The Division</u>

The Division argues that the Respondent failed to exercise reasonable precautions in performing the excavation at Pole No. 39 on Liberty Street in Hanson (Division Brief at 1). In support, the Division contends that the Respondent violated the Dig-Safe Law by failing to request Dig-Safe markings at Pole No. 39 (id. at 1-2). The Division relies on the following part of the Dig-Safe Law:

The making of an excavation without providing any or all notice or notices required by this section with respect to any proposed excavation which results in

any damage to a pipe, main, wire or conduit or its protective coating shall be prima facie evidence. . . . that such damage was caused by the negligence of such person.

(id. at 1 (quoting G.L. c. 82, § 40)). Moreover, the Division argues that the Respondent demonstrated a total lack of precaution by excavating directly above the gas main (id. at 1-2).

The Division also argues that the Respondent acted unreasonably by excavating with the auger to a depth of 12 - 18 inches (<u>id.</u> at 2). The Division contends that Respondent should have anticipated encountering a main at a depth of 18 inches, since the regulations require a minimum depth of 24 inches, and six inches of curbing and sidewalk was yet to be added (<u>id.</u>).

# B. <u>The Respondent</u>

The Respondent maintains that the excavation procedures it employed were in compliance with the standard for reasonable precautions (Respondent Brief at 6-7). The Respondent relies on the decision in <u>Umbro & Sons</u>, in which the Department rejected the position that use of digging machinery of any kind in close proximity to exposed utilities constitutes a failure to exercise reasonable precautions (id. at 7, citing <u>Umbro & Sons</u>, D.P.U. 91-DS-4, at 6-7 (1992)). The Respondent notes that in <u>Umbro</u>, the Department found no violation because the Division failed to introduce evidence that hand-digging was the industry practice under the circumstances, and the Respondent had shown that it had taken other sufficient precautions, such as identifying the utilities, hand-digging to expose the utilities, and employing an experienced backhoe operator (id. at 7-8, citing <u>Umbro & Sons</u>, D.P.U. 91-DS-4, at 7). Similarly, the Respondent states that the Division has introduced no evidence that hand-digging is the industry practice given the weather and ground conditions (id. at 8). Moreover, the Respondent contends that it had taken precautions by maintaining markings, utilizing an auger operated by an experienced worker who

knew the location of the facilities, and intending to hand-dig to expose the utilities after the auger penetrated the frozen ground (<u>id.</u>). The Respondent also notes that the fact the excavation took over 2 1/2 hours further demonstrates the reasonableness of the precautions taken (<u>id.</u> at 9).

The Respondent also argues that the decision in <u>Fed. Corp.</u> supports its position (<u>id.</u> at 8). The Respondent asserts that <u>Fed. Corp.</u> requires the Division to set forth a reasonable alternative before a violation can be found (<u>id.</u>, <u>citing Fed. Corp.</u>, D.P.U. 91-DS-2, at 5 (1992)). The Respondent contends that the Division has failed to meet its burden since hand-digging was not a reasonable alternative given the ground conditions (<u>id.</u> at 8-9).

The Respondent notes that the Department has held that the use of machinery to locate and expose utilities, rather than hand-digging, constitutes a failure to exercise reasonable precautions (<u>id.</u> at 11). The Respondent asserts that those cases are inapposite in the present matter (<u>id.</u>). The Respondent contends that the cases merely establish the proposition that it is unreasonable to use power machinery to completely expose utilities (<u>id.</u>). Thus, the Respondent claims that it acted reasonably because it used the auger to dig to a depth of only 12-18 inches and then intended to hand-dig to locate and expose the utilities (<u>id.</u> at 11-12).

The Respondent disputes the Division's argument that due to the regulatory minimum, the Respondent acted unreasonably by digging to a depth of 12-18 inches (<u>id.</u> at 9, n. 2).<sup>2</sup> The Respondent maintains that the regulatory minimum is irrelevant, nor does it create a question about the reasonableness of the precautions exercised (<u>id.</u>). The Respondent claims that it knew

The Division argues that since the regulatory minimum requires the gas main to be buried at least 24 inches, and six inches of cover had not yet been added, the Respondent dug too deep (Division Brief at 2). The Respondent contends that the Division's argument is tenuous (Respondent Brief, at 9, n.2).

the approximate depth of the main because it had previously excavated 20 other holes in the area (<u>id.</u>). Therefore, the Respondent asserts that it was justified in digging 12-18 inches using the auger (<u>id.</u>)

In sum, the Respondent argues that it pursued a policy of safety in performing the excavation (<u>id.</u> at 12). In support, the Respondent contends it acted reasonably by: (1) following the industry practice; (2) locating and maintaining markings; (3) employing an experienced operator; and (4) using the auger to penetrate frozen ground to a depth of 12-18 inches with the intent to hand-dig to expose the utilities (<u>id.</u>). Moreover, the Respondent maintains that the Division has not met its burden by failing to advance a reasonable alternative (<u>id.</u>).

## IV. STANDARD OF REVIEW

G.L. c. 82, § 40, states in pertinent part:

Any such excavation shall be performed in such manner, and such reasonable precautions taken to avoid damage to the pipes, mains, wires or conduits in use under the surface of said public way...including, but not limited to, any substantial weakening or structural or lateral support of such pipe, main, wire, or conduit, penetration or destruction of any pipe, main, wire or the protective coating thereof, or the severance of any pipe, main or conduit.

"Reasonable precautions" is not defined in the statute or the Department's regulations, nor do regulations specify approved conduct. Instead, case precedent has guided the Department in the Dig-Safe area. Several recent cases have established the proposition that using a machine to expose utilities, rather than hand-digging, constitutes failure to exercise reasonable precautions.

See Cairns and Sons, Inc. v. Bay State Gas Company, D.P.U. 89-DS-15 (1990); Petricca

Construction Company v. Berkshire Gas Company, D.P.U. 88-DS-31 (1990); John Mahoney

Construction Company v. Boston Gas Company, D.P.U. 88-DS-45 (1990); Northern

Foundations, Inc. v. Berkshire Gas Company, D.P.U. 87-DS-54 (1990). However, in Fed. Corp., hand-digging to locate facilities was found to be impossible, and use of a Gradall was found to be reasonable when the Division failed to set forth a reasonable alternative the excavator could have taken to avoid damage. Fed. Corp. v. Commonwealth Electric Company, D.P.U. 91-DS-2 (1992).

In order for the Department to justly construct a case against an alleged violator of the Dig-Safe Law for a failure to exercise reasonable precaution, adequate support or evidence must accompany that allegation. New England Excavating, supra, at 9; Fed. Corp., supra, at 5-6. In addition, the mere fact that a facility was damaged during an excavation does not by itself constitute a violation of the statute. Yukna v. Boston Gas Company, 1 Mass. App.Ct. 62 (1973). In specific instances where there has been an allegation of a failure to exercise reasonable precaution without demonstrations of precautions the excavator could or should have taken, the Department has found that the mere fact of damage will not be sufficient to constitute a violation of the statute. Umbro and Sons, D.P.U. 91-DS-4 (1992); Fed. Corp., supra; Albanese Brothers, Inc., D.P.U. 88-DS-7 (1990).

## V. <u>ANALYSIS AND FINDINGS</u>

The issue presented is whether the Respondent violated the Dig-Safe Law by failing to exercise reasonable precaution in performing an excavation on Liberty Street in Hanson, Massachusetts, on February 2, 1993. On that date, the Repsondent used an auger to relocate Pole No. 39 on Liberty Street. We agree with the Respondent that no reasonable alternatives were available in performing this excavation. The record shows that hand-digging was not possible due

to the frozen ground conditions. Moreover, the Respondent exercised precaution consistent with the guidelines enunciated in <u>Umbro and Sons</u>, D.P.U. 91-DS-4. The Respondent demonstrated that it employed an experienced operator to perform the excavation, the use of the auger provided greater protection to the workers and the utilities than other excavating machinery, and the use of an auger is the industry practice under such conditions. In addition, because the Respondent knew it was excavating in a Dig-Safe zone, it operated the auger at a very slow speed.

Furthermore, the fact that the Respondent performed some excavation by hand where possible also demonstrates the reasonableness of the precautions taken. <u>See Umbro</u>, D.P.U. 91-DS-4.

The Division advanced no alternatives to the method of excavation. Instead, the Division asserts that the position of the auger over the gas main constitutes a failure to exercise reasonable precaution. We disagree with the Division. To hold otherwise would impose absolute liability whenever utilities are damaged in the course of an excavation. See Yukna, 1 Mass. App.Ct. 62 (mere fact that a facility was damaged during an excavation does not by itself constitute a violation). The Division also contends that the excavator dug too deep given the regulatory minimum for burying mains. However, since the Respondent knew the approximate depth of the main at 30 inches, we find that the Respondent was justified in digging 12 - 18 inches with the auger. Accordingly, we find that the Respondent exercised reasonable precaution in performing the excavation.

The Division also argues that the Respondent's failure to notify Dig-Safe of the excavation at Pole No. 39 constitutes lack of reasonable precaution pursuant to the Dig-Safe Law.<sup>3</sup> We

The ground of failing to give a reasonably accurate description of the excavation site is immaterial to this proceeding since the Division did not address it in either the NOPV or

reject the Division's argument in the context of this case. Although the Respondent concedes that it did not request markings for Pole No. 39, it has shown that it had taken reasonable precaution in performing the excavation. The area had been properly marked and the Respondent proceeded with the excavation knowing the location of the utilities. We note that the exercise of reasonable care and the fact that the area had been marked ordinarily would not relieve an excavator of its duty to provide a reasonably accurate description of the excavation site. However, since the sole issue in this matter is whether the Respondent exercised reasonable precaution, we find no violation.

## VI. ORDER

Accordingly after due notice, hearing, and consideration, it is

ORDERED: That the notice of probable violation issued by the Division of Pipeline Engineering and Safety against Eastern Edison Company shall be and is hereby dismissed.

Kenneth	Gordon, Chairman	
Rarhara I	Cates-Garnick, Commissione	ar.

By Order of the Department,

the informal decision. See 220 C.M.R. § 99.08(4). The hearing officer, however, allowed the Division to argue the alleged notice deficiency from the viewpoint of failing to exercise reasonable precaution in performing the excavation at this site (Tr. at 31).

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Mary Clark Webster, Commissioner

Appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part.

Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. (Sec. 5, Chapter 25, G.L. Ter. Ed., as most recently amended by Chapter 485 of the Acts of 1971).